

Amendments to the Claims

Please cancel claims 3-39 without prejudice. Please add new claims 40-59 as shown below in the List of Claims.

List of Claims

1. (Original) A peptide no more than 30 amino acids in length, comprising at least 15 contiguous amino acids selected from:
 - (a) SEQ ID NO:1, wherein the tyrosine at position 7 must be present;
 - (b) SEQ ID NO:2, wherein the tyrosines at positions 2 and 6 must be present;
 - (c) SEQ ID NO:3, wherein at least one of the tyrosines at positions 3, 10, 11 or 12 must be present;
 - (d) SEQ ID NO:4, wherein at least one of the tyrosines at positions 12, 19, 20 or 21 must be present;
 - (e) SEQ ID NO:5, wherein the tyrosine at position 11 must be present; and
 - (f) SEQ ID NO:6, wherein the tyrosine at position 5 must be present.
2. (Original) The peptide of claim 1, wherein one or more tyrosines in said peptide are sulfated.
- 3-39. Cancelled
40. (New) The peptide of claim 1, wherein said peptide comprises at least 15 contiguous amino acids from SEQ ID NO:1, wherein the tyrosine at position 7 is present.
41. (New) The peptide of claim 40, wherein the tyrosine at position 7 in SEQ ID NO:1 is sulfated.
42. (New) The peptide of claim 1, wherein said peptide consists of the amino acid sequence of SEQ ID NO:1, and wherein the tyrosine at position 7 of SEQ ID NO:1 is sulfated.

43. (New) The peptide of claim 1, wherein said peptide comprises at least 15 contiguous amino acids from SEQ ID NO:2, wherein the tyrosines at positions 2 and 6 must be present.
44. (New) The peptide of claim 43, wherein the tyrosines at positions 2 and 6 in SEQ ID NO:2 are sulfated.
45. (New) The peptide of claim 1, wherein said peptide consists of the amino acid sequence of SEQ ID NO:2, and wherein the tyrosines at positions 2 and 6 of SEQ ID NO:2 are sulfated.
46. (New) The peptide of claim 1, wherein said peptide comprises at least 15 contiguous amino acids from SEQ ID NO:3, wherein at least one of the tyrosines at positions 3, 10, 11 or 12 must be present.
47. (New) The peptide of claim 46, wherein at least one of the tyrosines at positions 3, 10, 11 or 12 of SEQ ID NO:3 are sulfated
48. (New) The peptide of claim 1, wherein said peptide consists of the amino acid sequence of SEQ ID NO:3, and wherein at least one of the tyrosines at positions 3, 10, 11 or 12 of SEQ ID NO:3 are sulfated.
49. (New) The peptide of claim 1, wherein said peptide comprises at least 15 contiguous amino acids from SEQ ID NO:4, wherein at least one of the tyrosines at positions 12, 19, 20 or 21 must be present.
50. (New) The peptide of claim 49, wherein at least one of the tyrosines positions 12, 19, 20 or 21 of SEQ ID NO:4 are sulfated.
51. (New) The peptide of claim 1, wherein said peptide consists of the amino acid sequence of SEQ ID NO:4, and wherein at least one of the tyrosines at positions 12, 19, 20 or 21 of SEQ ID NO:4 are sulfated.

52. (New) The peptide of claim 1, wherein said peptide comprises at least 15 contiguous amino acids from SEQ ID NO:5, wherein the tyrosine at position 11 must be present.
53. (New) The peptide of claim 52, wherein the tyrosine at position 11 of SEQ ID NO:5 is sulfated.
54. (New) The peptide of claim 1, wherein said peptide consists of the amino acid sequence of SEQ ID NO:5, and wherein the tyrosine at position 11 of SEQ ID NO:5 is sulfated.
55. (New) The peptide of claim 1, wherein said peptide comprises at least 15 contiguous amino acids from SEQ ID NO:6, wherein the tyrosine at position 5 must be present.
56. (New) The peptide of claim 55, wherein the tyrosine at position 5 of SEQ ID NO:6 is sulfated.
57. (New) The peptide of claim 1, wherein said peptide consists of the amino acid sequence of SEQ ID NO:6, and wherein the tyrosine at position 5 of SEQ ID NO:6 is sulfated.
58. (New) The peptide of any one of claims 1, 2, or 40-57, wherein said peptide reduces the uptake of an R5 HIV isolate by cultured CCR5-positive immune cells by at least 50% at a concentration of 1 μ g/ml.
59. (Withdrawn-new) A method of preventing the binding of gp120 to CCR5, comprising contacting said gp120 with the peptide of any one of claims 1, 2, or 40-57.